MicroSurvey® FIELDGenius

INTRODUCTION

Thank you for your interest in FieldGenius – the most productive and easy-to-use data collection software solution ever!

If you are new to FieldGenius, you will be impressed by its graphic user interface, one-screen graphical stakeouts, an easily deciphered raw file that you can edit, powerful COGO tools, DXF file support (read, coordinate and write), streamlined connection to your instrument or computer, multi-point resections, roading, training movies, and the easiest, most powerful linework tools in the industry.

FieldGenius supports all common RTK GPS and generic NMEA receivers, as well as all standard and robotic total stations. With direct support for LandXML, you can stake to DTM surfaces or cross sections from your designed alignment. Real time surface generation allows you to compute volumes instantly.

About MicroSurvey

For over 25 years, MicroSurvey Software Inc. has developed a family of specialized computer software for land surveyors, civil engineers, mapping technologists, engineering technicians, drafting technologists, police officers, and accident reconstruction specialists. MicroSurvey supports what it builds, and the staff values & listens to its customers.

Our Mission Statement

The MicroSurvey Mission defines the way we do business and how we serve our customers. In 1985, we set out on a mission to create solutions that would offer our industry innovative technology and exceptional value.

The way we perceive and react to the ever-changing worldwide business climate continues the MicroSurvey tradition of innovation and value.

We engineer technology that is designed to work the way people think. We empower people – not machines.

Our solutions for surveying, construction, engineering and accident reconstruction are inspired by our uncompromising standards for integrity, quality, leading-edge technology, support and value.

TABLE OF CONTENTS

FieldGenius Features

- Feature Highlights 4
- Linework the FieldGenius Way 5
- Advanced Features 6
- Productivity Enhancements 7
- Features by Module 8

Field Hardware Support 9

Data Collection Hardware 10

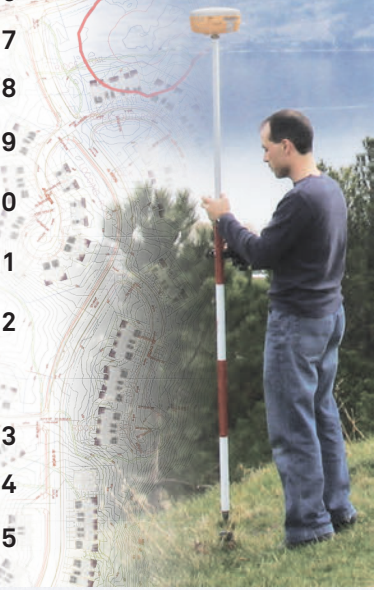
Testimonials 11

Pricing 12

Related Software

- STAR*NET and MSDX 13
- Desktop Survey & Design 14

Training and Support 15



www.MicroSurvey.com
1-800-668-3312

® Registered in the U.S. Patent and Trademark Office
All other brand names, product names or trademarks are property of their respective owners.

FieldGenius FEATURES

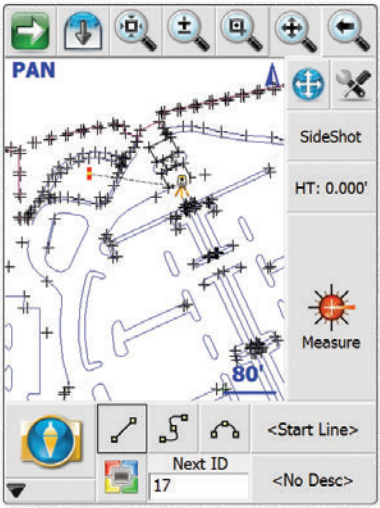
FIELDGENIUS HAS EVOLVED INTO THE MOST POWERFUL AND PRODUCTIVE DATA COLLECTION SOFTWARE

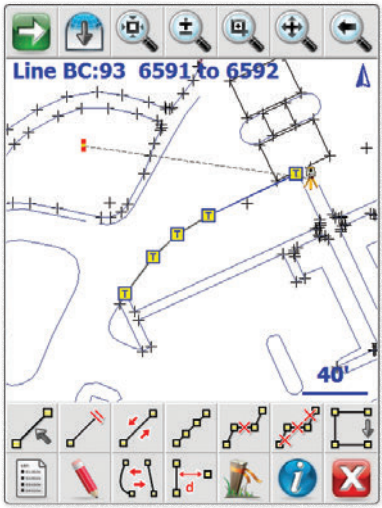
What sets FieldGenius apart from the competition?

- **Code-free** linework: Linework is created automatically without entering codes and is instantly displayed, eliminating the need for a separate sketch. No need to connect the dots back at the office.
- **Advanced** display with live graphics and intuitive interface. Logical icons, customizable toolbars, smart objects and easy to use GPS and total station controls. Standard or high-definition devices!
- **Productivity** tasks: Customize your data collector by assigning commands to your keypad keys.
- **Calculating** tools: Access the built-in RPN calculator from any edit field and easily use surveying calculations.
- **Plus** advanced roading, surfacing, slope staking, smart points, DXF & LandXML import/export and full robotic and GPS support. FieldGenius is the choice of organizations that value productivity.

LINEWORK THE FIELDGENIUS WAY!

MicroSurvey has developed the simplest linework connectivity in the industry. Absolutely NO CODING is required to generate your linework in the field in real time. Other data collection systems force you to predefine codes for generating linework. MicroSurvey has made real time linework as simple as connecting the dots.





FIELDGENIUS LINEWORK IS EASIER THAN ANY OTHER DATA COLLECTION SOFTWARE:

- You can connect points that have different descriptions.
- Linework can consist of straight segments, arcs and splines.
- Linework is ALL in 3D including arcs and splines.
- You can have more than one line with the same description; FieldGenius is smart enough to know which line to work on.
- Multiple lines can connect to the same point.
- Missing segments can be drawn using the pencil tool any time you need to add more info.
- A bad line can be removed instantly by tapping it and selecting “Delete Segment”.

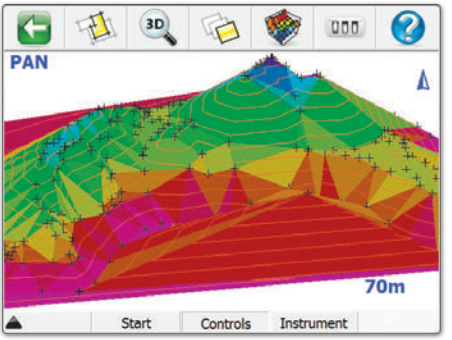
Sound simple? It is. You’ll find FieldGenius is the easiest system to generate the most accurate drawing from shots in the field.

FieldGenius FEATURES

FIELDGENIUS INCLUDES MORE ADVANCED FEATURES THAN ANY OTHER DATA COLLECTION SYSTEM

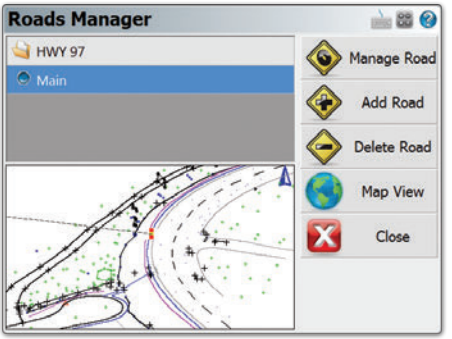
Digital Terrain Modeling, Volumes and Contouring

- FieldGenius has the ability to create and utilize DTM surfaces from existing survey data or create a DTM in real time as the data is collected. The TIN and contours will automatically update as each new shot is taken.



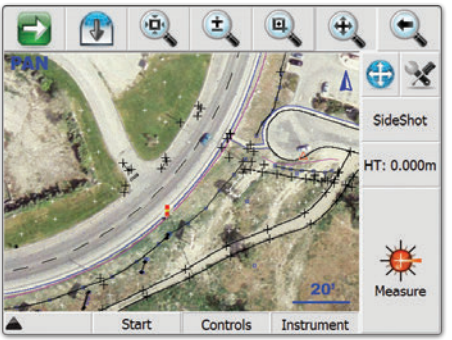
Powerful Roading

- FieldGenius roading allows you to manually input or import your alignment data including centerline, vertical and template data. Powerful alignment staking tools help you stake your points along your alignment with confidence.

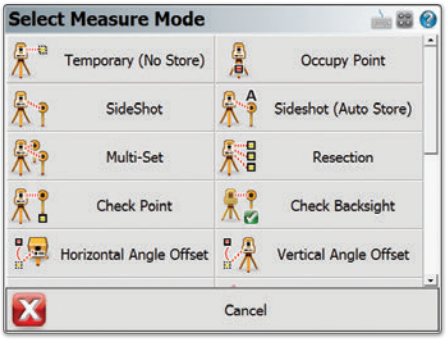


Georeferenced Images

- Use georeferenced images and maps in the background for visual reference of your survey work.

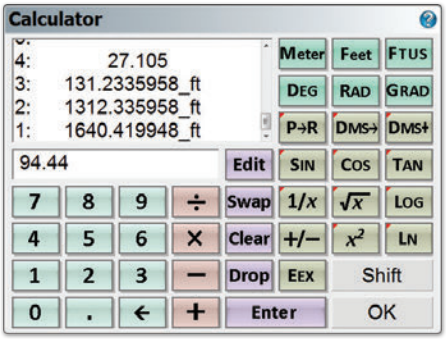


WORK FASTER AND MORE EFFICIENTLY IN THE FIELD WITH THESE PRODUCTIVITY ENHANCEMENTS



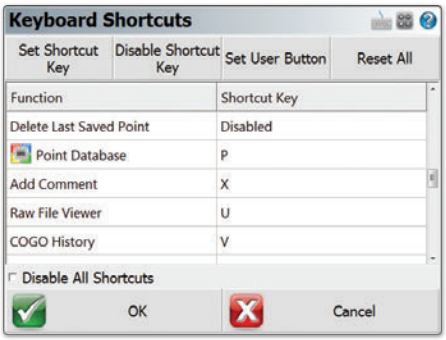
Instrument Control at your Fingertips

- Total Station and GPS functions are available on a common and easy to use instrument toolbar. Access measure modes with the click of a button.



Powerful RPN Calculator

- FieldGenius includes an easy to use and intuitive RPN calculator. Quick access to the calculator from any edit field makes survey calculations and routines a breeze.



User Definable Shortcuts

- Increase your productivity by assigning frequently used commands to keys on your data collector.

FieldGenius FEATURES

FIELDGENIUS FEATURES BY MODULE

FieldGenius Standard Features

- Modern Windows interface with smart menus, smart objects and incredible graphics
- The drawing is primary to the interface
- Real-time drawing generation with automatic linework
- Built in COGO – intersections, inversing and traversing
- Enter, edit and stake points
- One button project manager
- DXF import for background project view
- DXF coordination of lines, arcs, polylines, points...
- FBK export for easy Autodesk LDD Import of raw data, points and linework
- ASCII import/export
- Automatic traversing (1 set, 2 set, n sets)
- Traverse closure calculations
- Raw data editing
- Traverse re-coordination in the collector
- Closure calculations
- Angular adjustment, compass balance
- Extensive total station support
- Support for multiple hardware platforms
- One button file transfer to desktop systems
- 3D data view with dynamic zoom, pan and scroll
- Support for built-in GPS on Nautiz X7

Advanced Features
(Requires Advanced Module)

- LandXML project explorer
- Surface modeling in real-time
- LandXML alignment, cross section and zone staking
- Fixed area calculations
- Volume calculations
- Stake to DTM
- Contouring in real-time
- GIS attribute collection
- 3D alignment, cross section and template view
- Shaded, rendered view of surface data

Robotics Features
(Requires Robotics Module)

- Automatic "Turn to Point" features
- Navigate to stake point
- Advanced robotic control tools
- Wireless radio and bluetooth support
- Automatic prism tracking
- Assign robotic functions to keypad keys
- Real-time tracking icon in map view
- Support for Trimble, Geodimeter, Topcon, Leica and Sokkia
- RC-2/RC-3/RC-4 (Topcon Support)

RTK GPS Features
(Requires GPS Module)

- Full RTK GPS support
- Profiles for multiple receivers – makes setup easy
- Full RTK support with tracking icon in map view
- Automatic geodetic transformations from WGS84 to local coordinate systems
- Dynamic GPS toolbar – HDOP, VDOP, PDOP and satellites
- Heads-up display shows lat/long or grid coordinates
- Local transformation (Helmert)
- Horizontal/vertical adjustment
- Statistical analysis with residuals and RMS
- Works with Leica Geosystems, Trimble, Topcon, Javad, Altus, Ashtech, Thales, Sokkia, Novatel, NEMA, STONEX, FOIF, NavCom, Champion and more!

*Visit the MicroSurvey website for an updated list of hardware support.

Microsoft Partner
Silver Independent Software Vendor (ISV)

FIELD HARDWARE SUPPORT

FIELDGENIUS WORKS ON MORE HARDWARE MODELS THAN THE COMPETITION!

Data Collector Support:

- **Nautiz X7 and Algiz 7** by Handheld, Juniper Systems Archer and Allegro Field PCs, TDS Nomad/Ranger/Recon, Trimble TSCE/TSC2, Topcon FC-100/FC-1000/FC-2000, Compaq/HP iPAQ Series and the Leica RX1250, CS10, CS15 and TS11, TS15 onboard!

- **Works** on Windows Mobile 5 and 6 devices.

- **Excellent** for tablet devices such as the Algiz 7 by Handheld and the Mesa Rugged Notepad by Juniper Systems.

Conventional/Robotic Total Station and RTK GPS Systems Support:

- **FieldGenius** supports virtually all conventional total stations dating back to the early `90s. FieldGenius has built-in support for all major manufacturers' robotic total stations and RTK-grade GPS systems as well. MicroSurvey's robotic and GPS support has the most intuitive interface in the industry. All robotic and GPS settings and functions are easily accessible from a control toolbar. We are continually developing FieldGenius to support the newest and most advanced hardware on the market as it becomes available.

DATA COLLECTION HARDWARE

A WINNING COMBINATION

FieldGenius software is bundled with all hardware configurations – making the best use of standard and high definition displays with large buttons and crisp graphics.

Nautiz X7 by Handheld exemplifies the evolution of handheld computers. Packed with innovative advancements in PDA technology, it surpasses everything else on the market with its mix of power, functionality and ruggedness.

The **Archer Field PC by Juniper Systems** is rugged, powerful, and versatile to handle your most demanding needs. It meets IP67 and Mil-Std-810F standards for drop, vibration, immersion, humidity and operating temperatures.

The ultra-rugged **Allegro MX Field PC by Juniper Systems** is built to perform in the most demanding outdoor or industrial environments.

For those seeking a larger screen and a more powerful field computer, ruggedized tablets are the way to go. The **Algiz 7 by Handheld** sports a 7-inch screen running Windows 7, along with all the bells and whistles. If you would like to stick with the leaner Windows Mobile, the **Mesa Rugged Notepad by Juniper Systems** is the perfect solution.

READ WHAT PROFESSIONALS IN THE FIELD HAVE TO SAY ABOUT FIELDGENIUS

"In 2002, when we began using FieldGenius, it was such a solid, intuitive, productive tool, that I couldn't imagine at that time how it could be improved. However, it is apparent that the folks at MicroSurvey are striving for perfection, as the latest version shows. I'm skeptical that they can find a way to improve the current version!

We've tried other field software, sometimes at the request of a new employee that is familiar with one of the leading competitors, but once that person has 15 minutes with the FieldGenius program, they don't want to go back to what they were familiar with. It's just that easy to learn, yet powerful enough to do whatever we need it to, and more.

It seems that on a weekly basis, at least one member of our field crews can be overheard telling another person in the office about the amazingly cool feature that they just found in the program. We love it."
Matt Walters, PLS
Walters & Associates, LLC

"If you want to do a lot of field coding, go ahead and buy TDS or Carlson but if you want automatic field coding that requires no coding (other than tapping on an icon for lines, arcs or splines) then buy FieldGenius from MicroSurvey.

MicroSurvey FieldGenius has the most in-depth website of anyone on the market. Their technical support response is almost instant. They have spent a lot of time and effort making training movies which are on-line and their user manual is the best on the market. Try finding that with TDS or Carlson."
John Roberson, RLS
Georgia

PRICING

READ WHAT PROFESSIONALS IN THE FIELD HAVE TO SAY ABOUT FIELDGENIUS

FieldGenius Software & Modules	
FieldGenius Standard (NO Modules)	$495
+ Total Station Module	+$500
+ GNSS/GPS Module	+$800
+ Advanced Module (Roading, Surfacing, Slope Staking)	+$500
+ Robotic Module (Requires Total Station Module)	+$500

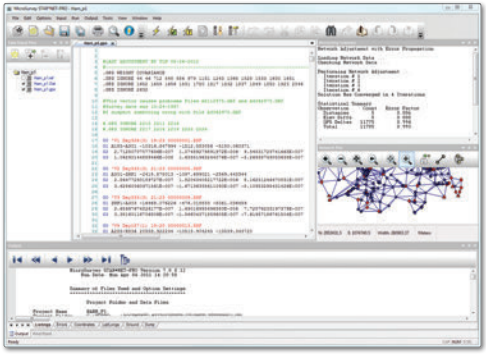
Typical Configurations	
FieldGenius "Total Station" (FieldGenius Standard + Total Station Module)	$995
FieldGenius "GNSS/GPS" (FieldGenius Standard + GNSS/GPS Module)	$1,295
FieldGenius "Premium" (FieldGenius Standard + ALL MODULES)	$2,195

Popular Data Collector Bundles (see website for more)	
MicroSurvey DC4 + FieldGenius + GNSS/GPS Module Built-in GPS, 3MP Camera, 624MHz CPU, 640x480 VGA, 256MB RAM/storage (up to 8GB), WiFi, Bluetooth	$2,195
Nautiz X7 + FieldGenius + Total Station Module + Rob. Module Built-in GPS, 3MP Camera, 806MHz CPU, 640x480 VGA, 128MB RAM/4Gigabytes storage, Altimeter, WiFi, Bluetooth, Compass	$2,995
Handheld Algiz 7 (Tablet) + FieldGenius + GNSS/GPS Module Built-in GPS, 2MP Camera, 1.6GHz CPU, 1024x600, 2GB RAM, 64GB SSD storage, WiFi, Bluetooth, Windows 7 Ultimate	$3,695

FieldGenius Upgrades (inc. 1yr maintenance support)
Upgrade from any version of FieldGenius: $350 + $95 per module

Maintenance Subscription Plans	
Standard 90 days from date of purchase	FREE
Maintenance Support Plan (1 year)	$195

STAR*NET – NETWORK ADJUSTMENT UTILITY



MicroSurvey STAR*NET is an easy-to-use Windows application that adjusts 1D/2D/3D survey networks using rigorous Least Squares techniques.

STAR*NET handles networks containing conventional observations with up to 10,000 adjustable stations. Differential leveling observations can also be included within a 3D adjustment. Whether a survey consists of a single-loop traverse or a complex network of interconnecting traverses, all observations are adjusted simultaneously to produce a single best-fit solution.

MICROSURVEY DATA EXCHANGE

Also known as MSDX, it is a FREE program designed primarily for FieldGenius users. It allows you to easily exchange survey data between FieldGenius and other CAD systems.

RELATED SOFTWARE

MicroSurvey CAD – COMPLETE DESKTOP SURVEY & DESIGN

When you need a fully featured desktop survey software package, you now have two options for one competitive price. Every license key includes a copy of MicroSurvey CAD and MicroSurvey inCAD. You can run on the included IntelliCAD 6.6 engine or run on the latest versions of AutoCAD®. You can have both versions installed on your machine, or you can move the key between machines with different versions installed. Our USB licensing system enables us to provide you with maximum flexibility.

Either way you choose to use it, you get complete survey drafting, COGO, DTM, traversing, volumes, contouring and data collection interfacing. MicroSurvey desktop solutions are compatible with field data from all major total stations and data collectors.

MicroSurvey CAD

IF YOU PREFER AUTOCAD, TRY:

MicroSurvey inCAD

An AutoCAD® plug-in with all MicroSurvey tools

MicroSurvey CAD EMBEDDED

Stand-alone CAD application, built with Autodesk technology™

"The combination of FieldGenius and MicroSurvey CAD gives me a complete software solution for surveying. The integration of the field and office software is unbeatable. Data processing is a breeze. From small stakeout jobs to large developments, MicroSurvey has me covered!"
Mark Cahill, BCLS
AllTerra Land Surveying & Geomatics

TRAINING AND SUPPORT

All MicroSurvey products come with 90 days of FREE support, which includes email and phone support. While on a support plan, you also receive free service packs and upgrades as they become available. Here are some other useful support resources:

Training Material (www.microsurvey.com/helpdesk)

Available for free on the MicroSurvey Helpdesk are hundreds of training videos and articles. No access fees, no limitations. Search the knowledge base for answers to your questions – basic or advanced!

User Forums (www.microsurvey.com/forum)

The user forum is an excellent community in which to bounce questions off other professional users, like you.

Feedback Forum (feedback.microsurvey.com)

The Feedback Forum is a revolutionary tool that allows YOU to direct the development of the MicroSurvey products you buy. It collects your suggestions and allows you to vote on suggestions submitted by the other professionals using the software. Use your votes wisely!

Classroom Training (www.microsurvey.com/training)

Want something a little more hands-on? MicroSurvey invests in the best trainers and training facilities.

Receive instructor-lead training while using your own workstation and copies of all software used in the course.

Call for booking, or view our training schedule online.

Thank You

Please call us or visit our website for more information on how this, or other MicroSurvey products, can help you improve your productivity!

Train with MicroSurvey in one of many facilities across Canada and the US.

MicroSurvey®

Part of Hexagon

®MicroSurvey and FieldGenius are registered in the USA Patent and Trademark Office. Autodesk, AutoCAD, DWG are registered trademarks or trademarks of Autodesk, Inc. in the USA and other countries.